BRIAN SANDOVAL Governor

STATE OF NEVADA

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GOVERNOR'S OFFICE OF ENERGY

MINUTES Committee on Energy Choice

March 7, 2018

The Committee on Energy Choice held a public meeting on March 7, 2018, beginning at 12:00 P.M. at the following location:

Legislative Counsel Bureau 401 S. Carson Street, Room 1214 Carson City, NV 89701

The meeting was also available via videoconference at:
Grant Sawyer State Building
555 East Washington Avenue, Room 4401
Las Vegas, NV 89101

1. Call to order and Roll Call: Chair Mark Hutchison called the meeting to order at 12:03 PM. Chair Hutchison thanked all for attending the meeting and noted that the agenda will be followed as noticed. The agenda item was opened up for roll call and a quorum was confirmed. Prior to continuing onto agenda item no 2, Chair Hutchison reminded all in attendance of proper microphone etiquette and to silence all cell phones and devices.

Committee Members Present

Mark Hutchison
Adam Kramer
James Settelmeyer
Chris Brooks
Dave Luttrell
Erik Hansen
Dana Bennett
Ann Silver
Jeremy Susac
Jennifer Taylor
Angie Dykema
Adam Laxalt
Ernest Figueroa

Daniel Witt Kevin Sagara Barry Gold Paul Caudill Paul Anderson

Committee Members Absent

Andy Abboud Joe Reynolds Darren Daboda Kelvin Atkinson Jeremy Newman James Oscarson

2. Public Comment and Discussion:

Chair Hutchison opened Agenda Item No. 2 and asked if anyone from the public sought to make a comment on the matter in both Carson City and Las Vegas locations.

Reverend Leonard Jackson, Director of Faith Organizing Alliance, an organization that works on advancing the clean energy of Nevada. His organization has been monitoring the meetings of the Committee and are particularly interested in making sure that recommendations for clean energy choice chart a path forward for all of Nevadans. Mr. Jackson mentioned Switch's announcement of a new solar portfolio and NV Energy's commitment to move forward on 100% clean energy in the State. Mr. Jackson said that he believes smart state policy on a strong clean energy standard is the only way the Nevadans get the clean power they are demanding. Mr. Jackson expressed his support of the initiative and overall clean energy choice available for all Nevadans especially in the community solar area.

Angel DeFazio, citizen, provided public comment in Las Vegas speaking about how she spent hours reviewing dockets from the PUC regarding the energy choice constitutional amendment and feels the vague language induced Nevada voters to believe they would have both lower rates and energy choice. Ms. DeFazio said that Ned Ross of RESA, one of the initiative's drafters admitted at the PUC workshops that there is no assurance of lower rates. She feels that this makes the implementation of the initiative a constitutional lie. Ms. DeFazio said that she felt this was a revenge initiative from the companies that had gone through the process of exiting the system and is purchasing power from other utilities. Ms. DeFazio provided her full public comment in writing which has been attached as exhibit 'A' for full reference.

Terry Grace, RESA said that he wanted to clarify the comment regarding Ned Ross and RESA made be the previous speaker. He said that neither had anything to do with drafting or promoting the ballot initiative. They have only provided information to the committee as asked for.

Eymhy Corpus provided public comment representing the 70 thousand or more Sierra Club members and supporters. She expressed the support of this group for the initiative and how to. Ms. Corpus provided 925 signed, completed petitions that stated the following:

To: Committee on Energy Choice From: Another Nevadan for clean, reliable, affordable energy

I am writing today to urge this committee to support the energy choice principals. Before the voters of Nevada supported energy choice, both clean energy advocates and industry experts agreed upon a list of energy choice principals to incorporate into the restructured market. The principals include:

- More clean energy, lower bills, improved energy efficiency and more – should be available to all consumers, from individual low-income users to the largest industrial customers and everyone in between. - Protection of Existing Customers – Any restructuring should ensure that existing customers, especially low-income Nevadans, are not left with increased costs when large users choose different energy provider. - Renewable Energy Targets – A restructured energy market should require that all energy providers meet the renewable portfolio standard. Nevada should set a new long-term goal of achieving at least 80 percent clean energy by 2040, with interim milestones to steadily move toward cleaner energy.

These are just an excerpt from the larger energy choice principals. Nevada is ready to accelerate our development of clean, renewable energy from our abundant geothermal, solar and wind resources to power our economy, keep our air clean and provide good paying jobs for Nevadans. I urge the Committee on Energy Choice to adopt the energy choice principals.

These petitions were not scanned and made part of the record due to the personal identifying information that was written on the petitions. The original petitions were sent back to Ms. Corpus.

Doug Hazard, citizen spoke about the different rates and information that he found online by googling deregulation. He discussed his concerns about changing what the current structure in our market is and when changing it, what the costs are for Nevadans. Mr. Hazard spoke about other states and the costs they paid. He spoke about how Nevadans shouldn't pay for these additional costs which right now no one can actually tell anyone what the costs are. Mr. Hazard believes the Nevada current rates by NV Energy are very close to Texas' rates who are in a deregulated state. Mr. Hazard asked the committee to recommend a no-go to the Governor regarding this initiative. He asked for this because he feels that this program cannot be implemented without increasing rates and adding costs to all of Nevadans.

Chair Hutchison asked Vice Chair to direct public comment in Carson City.

Vice Chair Bennett asked for public comment in Carson City. No public comment was provided.

Chair Hutchison closed agenda item No. 2.

3. Approval of Minutes from November 07, 2017 meeting:

Chair Hutchison opened agenda item No. 3, and opened the floor for any comments, additions or corrections on the draft of these minutes.

Attorney General Adam Laxalt made a motion to approve the minutes. Mr. Kramer seconded the motion. Before voting, Mr. Brooks commented that he had not received the minutes yet and would like the approval of the minutes to be held for the moment. After some discussion it was determined that the minutes had not been sent to all of the committee members prior to the meeting and that they would need to be approved today to stay in compliance with Open Meeting Law. The motion to approve and the second was withdrawn. Chair Hutchison determined that this agenda item needed to be rolled to the end of the meeting for approval after agenda item number 5. Ms. Taylor asked if Mr. Morris could ask staff when the minutes were sent out as she could not find the email. Mr. Morris said that they were being resent and a hard copy would be given to the members in the south as the northern members already had a copy in the packet.

Agenda item number 3 was readdressed after agenda item number 5.

Attorney General Adam Laxalt made a motion to approve the minutes from November 7 with no changes. Mr. Kramer seconded the motion to approve. The minutes were approved with no changes unanimously.

Chair Hutchison closed agenda item No. 3 and moved onto agenda item No. 6

4. Presentation: Overview of Federal Energy Policy Implementation for Restructured and Deregulated Markets – Marc Spitzer, Former Commissioner, Federal Energy Regulatory Commission (FERC), Former Arizona Senator and PUC Commissioner:

Chair Hutchison opened agenda item No. 4 and welcomed the presenter.

Mr. Spitzer began by speaking about his relationship with a former commissioner and his mission within FERC as well as his dedication to pay attention to energy in Nevada. Mr. Spitzer gave the members of the committee his background and current information about what he does in the industry. Mr. Spitzer described his observations of retail competition in the west specifically in a non-RTO market. Mr. Spitzer gave a history briefing of the electricity market after its discovery by Thomas Edison. He spoke about what happened during those times and how the regulation of the market was handled. He discussed the issues that arose in those days and ultimately what happened in the 1970's. Mr. Spitzer spoke about different shocks to the market during the late 1970's, who deregulated, what was created out of the FERPA act and how natural gas was handled. He spoke about prices, terms and conditions of those days. Mr. Spitzer then spoke about the 2000's and how FERC order 888 would work in the State of Arizona. He was elected as an Arizona PUC Commissioner and started looking more at the different types of markets, the services available, the costs and where FERC stands in the market. Mr. Spitzer discussed his views on the different markets and what he likes about them. Mr. Spitzer stated that in his opinion the CAISO is a wonderful model and provided some of his views on why he felt this way. Mr. Spitzer provided a very in-depth speech regarding the market and the current issues faced by all. He spoke about the PJM and how the wholesale market can see real time prices for each area which allows for a better retail market. He finalized his speech by stating that it is his view that Nevada should join an RTO and in his opinion, this would be the best route. Mr. Spitzer said that there are very demonstrable benefits, proven benefits for the retail customers in markets that have been deregulated and part of an RTO and that those that do not have the benefit of an RTO, just simply don't provided retail choice.

Mr. Luttrell began by asking Mr. Spitzer to clarify what he meant when he discussed the wholesale market changes that are occurring in Nevada today and saying that they are not related to energy choice and not a benefit to the consumer. As a utility provider, Mr. Luttrell does not agree with this statement and feels that the changes that are being made are a benefit.

Mr. Spitzer said that he believes the EIM is positive and the FERC model for restructuring in order 888 provides benefits to the consumer. He agrees that wholesale markets do provide benefits but his hang up is with retail and passing those benefits on.

Mr. Luttrell and Mr. Spitzer then discussed how Mr. Spitzer views the mechanism to pass those benefits on in a retail market and Mr. Spitzer's views on the different options.

Ms. Taylor thanked Mr. Spitzer for his presentation and the history of the market that he provided. She asked Mr. Spitzer to talk more about the energy crisis that he mentioned and considering his experience she would like to know what FERC has put in place post Enron. Ms. Taylor asked him to speak about establishing market monitors, market manipulation, the 205 law, the establishing of market monitors and how to differentiate between market manipulation and market power. Ms. Taylor apologized but said that she understood this was what he was coming to talk about and that there were constraints put in place to ensure that it doesn't happen again.

Mr. Spitzer discussed the consequence of the CA energy crisis and the market manipulation rules as part of the policy act in 2005. FERC had very limited authority to deal with that type of misconduct however in 2006 they were able to watch everything more closely and penalize those that improperly traded in the markets in order to manipulate pries to the disadvantage of customers. He feels that the authority granted to FERC allows more ability to minimize risks but the cases that still come in front of FERC are evidence of the fact that it could still happen. Mr. Spitzer went on to discuss Market Based Rates and Market Power in length.

Ms. Taylor then talked about the documentary she watched a few days prior called 'The Smartest Guys in the Room' and asked if he felt that FERCS authority is in a place to be able to check and catch the newest thing that would be coming down the road as we get into new technologies that are part of the energy system?

Mr. Spitzer said he does, he is an optimist. He then discussed why he felt this way in great length.

Mr. Brooks retail benefits short of participating in a wholesale market. We were pursuing at looking at joining an RTO or CAISO, involved in the EIM with those folks and it seems to be a natural evolution. He asked what Mr. Spitzer would provide as advice to the Nevada Legislature if they were to start looking at participating in governance with CAISO.

Mr. Spitzer spoke about a case where FERC challenged the model of governance of CAISO. FERC lacks authority to govern CAISO's utility part. Mr. Spitzer said that if the CAISO board could be changed to include all governing boards of states involved, that would allow for benefits at the retail level.

Mr. Figueroa just wanted to thank Mr. Spitzer for coming and discussing all that he did.

Mr. Kramer and Mr. Spitzer discussed the term de-regulation and the point that it's not really de-regulated just a change in the regulations and more of a restructuring. Mr. Spitzer discussed in detail how Nevada's interest would be considered in CAISO, and what the effects of Nevada joining CAISO would be. Mr. Kramer and Mr. Spitzer also discussed how CAISO is regulated. MR. Spitzer discussed his involvement and job with FERC as well.

Chair Hutchison thanked Mr. Spitzer for his time and closed agenda item No. 4.

5. Presentation: Overview of Model State Legislation for Restructured Energy Markets – Glen Andersen, Energy Program Manager, National Conference of State Legislatures (NCSL):

Chair Hutchison opened agenda item No. 5 and welcomed the presenter.

Glen Andersen explained who the National Conference of State Legislatures are and what they do for all 50 States. Mr. Andersen provided an overview on what four other states have done when exploring and implementing energy choice in their own areas. He showed a map of the US identifying that fourteen (14) states have retail choice and eight (8) states have suspended retail choice. He discussed the differences between some of what the states have implemented, what the challenges were for those states and what they now offer under retail choice. Mr. Andersen spoke about what happened in Illinois, Montana, Texas and Pennsylvania. He discussed what happened during each of these states process of implementing retail choice and the issues to consider when Nevada decides to go through the conversion to retail choice. Mr. Andersen discussed the importance of consumer protections and having a variety of portfolio choices in a wholesale market. He also discussed some of the issues when a state moves forward too quickly without understanding the whole picture, like Montana. Mr. Andersen also discussed the issues about Maine and New York finding that customers have ended up paying a higher utility rate than if they had remained with the original utility provider.

Mr. Settlemeyer and Mr. Andersen discussed other states that went through this that had local coops that were not part of the de-regulation. Mr. Settlemeyer would like information about this as well as states that mandated the coops to follow the investor owned utilities.

Mr. Figueroa asked if Mr. Andersen knew of any other states where the deregulation was a constitutional amendment and Mr. Andersen did not know of any states where that had happened.

Mr. Caudill asked who paid for the price cap and the additional rate relief.

Mr. Andersen stated that he believes that it came from rates, either a sure charge or something like that.

Mr. Brooks asked in the last 20 years how many states have gone from traditional to restructured gone forward and moved back and how many went from retail choice to back to the original structure of the market.

Mr. Andersen said that there were eight states that suspended the retail choice approach, some of the states have implemented a small market of choice so that wouldn't be considered a full retail choice market. He stated that there has been very little activity since 1997 because of what happened in California.

Mr. Gold discussed how Mr. Andersen talked about the benefits of retail and that they seem to favor the commercial and larger customers are more than for the residential customer. He wanted to know if there are states that prohibit door to door sales.

Mr. Andersen did not know the number of states that have prohibited this type of sales and believes it requires regulators to have a close eye on the market and making sure that there are not improper sales practices which is similar to sales as a whole, not just this market. He said the key is setting a good framework for consumer protections and constrain sales approaches.

Mr. Gold then asked if they find that the problems are ongoing and the legislation has to continue to modify regulations to continue to address these issues.

Mr. Andersen said that this will happen and it is possible that it would have to continually be addressed

Ms. Taylor asked how he picked the states he provided information on. Mr. Andersen said it was just a lot of reading and he picked these because they rose to the top. Ms. Taylor asked if he could speak about states that were closer in resources and size to Nevada. Mr. Andersen discussed some of this in other states and those challenges, he did not have a more exhaustive detail on smaller states because he choose the ones that did well in the market.

Mr. Paul Anderson and Mr. Glen Andersen discussed the part of the presentation where it stated that low income consumers were seeing an actual increase in their billing. They discussed that this research was done at the PUC level within those states and the definition of low income could be different than what is defined at the federal level. Mr. Anderson and Mr. Andersen discussed the Provider of Last Resort (POLR) and how that entity was designated. In Texas there is no POLR but most states that have transitioned to a competitive model, the incumbent utility who owns the wires and distribution is designated as the POLR. They discussed who regulates the POLR and what happens with alternative providers. They discussed how the higher costs were determined, and what could be also considered in measuring the data.

Chair Hutchison thanked Mr. Andersen for his presentation and offer for additional information.

Chair Hutchison closed agenda item No. 5 and went back to agenda item No. 3

6. Report and Recommendations from CEC Technical Working Group on Generation, Transmission, and Delivery – Dave Luttrell, Technical Working Group Chairperson:

Chair Hutchison opened agenda item No. 6 and asked committee member Dave Luttrell to provide the recommendations of the technical working group he had chaired during this last year on Generation, Transmission, and Delivery.

Mr. Dave Luttrell read a statement that he had prepared for the agenda item. He thanked Governor Sandoval for his insight in assembling the committee which has provided an open forum to discuss the advantages and disadvantages of energy choice in Nevada and to discuss how to best implement Energy Choice should the Nevada electorate so decide this coming November that it is what they want. Mr. Luttrell thanked Lt. Governor Hutchison on his leadership over the committee and he thanked the members of his technical working group for participating.

Mr. Luttrell expressed his belief that the committee has provided a valuable educational service to the public, for the legislature, and for the executive branch agencies this past year. Mr. Luttrell said that a year ago no one really knew what it would take to implement energy choice and now after everything that has been discovered and discussed, it should be known that it is a daunting task to make this change. He spoke about the adverse effects that will impact rate payers, especially the lower income which was heard throughout the presentations. He spoke about the multiple meetings and presentations that occurred to provide his technical working group with the information needed to submit recommendations to the full committee. Mr. Luttrell expressed his gratitude for the immense amount of knowledge that the committee has but also concern about the members not having the expertise needed to create this type of market and the importance of figuring out all the issues prior to implementing one. He said that he believes that this will be a long and involved process and it should be clear to all involved that generation and transmission will not develop on its own. It will be a long process and if generation or transmission do not keep pace with load growth then rate payers who cannot negotiate favorable terms will bear the brunt of an unfavorable energy crisis.

Mr. Luttrell discussed the three recommendations that the Technical Working Group on Generation, Transmission and Delivery submitted to the full committee for discussion. Mr. Luttrell stated in closing that proper generation, transmission and delivery systems are the foundation of Energy Choice if it is to be implemented correctly. Relying on the California Independent System Operator to figure these things out for us is not the correct solution. Their wholesale market and their transmission system have been derived by Californians for Californians. Simply joining the CALISO as the solution will increase transmission costs in Nevada by up to four-fold. We as Nevadans must figure out the best solution for Nevada if Energy Choice passes again. Mr. Luttrell stated that his main recommendation as chairman of the Technical Working Group on Generation, Transmission and Delivery and a member of this committee is that we recognize our limitations and recommend to the Legislature in its upcoming 80th session to provide additional funding to the Public Utility Commission of Nevada or to the Governor's Office of Energy to retain a consulting team that can take this topic to a more detailed level.

A full copy of the recommendations is part of the meeting materials and have been attached as exhibit C for full reference.

Mr. Luttrell and Mr. Witt discussed the postage stamp rate that was mentioned regarding the recommendation about studying the transmission import and export capacity if additional expansion is necessary to join a wholesale market such as CAISO. Mr. Luttrell provided information regarding why he feels it is not an easy comparison.

Mr. Luttrell and Mr. Kramer discussed the rates, and the assumption that CA costs would be passed onto Nevada if joining their ISO occurred. They discussed whether or not there is a way to structure the joining of an ISO or RTO in a way that will protect Nevada.

Mr. Luttrell and Mr. Figueroa discussed the passing along of construction costs to rate payers under recommendation no 2. They discussed the four must run generation units that are out of

money or coal resources currently in the state and the concern of placing the investor owned utility in limbo because there is no decision regarding development of transmission resources which takes many years to do. They discussed that under this any costs incurred by the vertically integrated utility would be recovered by the current irp and general rate case process.

Mr. Luttrell said that these are superficial recommendations and a lot of work and analysis needs to go into what is being done. He said that Nevada should work towards resolving these issues and not putting them off.

Mr. Settlemeyer stated that he believes that we need to operate under the facts that exist today and not what can be done in the future and appreciates the report and recommendations of Mr. Luttrell's technical working group.

Chair Hutchison thanked Mr. Luttrell and all of the members of the technical working group that worked on these recommendations.

Chair Hutchison closed agenda item No. 6

7. Report and Recommendations from CEC Technical Working Group on Innovation, Technology and Renewable Energy – Jennifer Taylor, Technical Working Group Chairperson:

Chair Hutchison opened agenda item No. 7 and asked committee member Jennifer Taylor to provide the recommendations of the technical working group she had chaired during this last year.

Ms. Taylor provided her thanks to the Governor, Chair Hutchison and the remainder of the committee members.

Ms. Taylor provided background regarding the direction for the Committee in Executive Order 2017-03 which was to identify the legal, policy and procedural issues that need to be resolved and to offer suggestions and proposals for legislative, regulatory and executive actions that need to be taken for the effective and efficient implementation of the initiative. Ms. Taylor discussed Executive Order 2017-10, which amended EO 2017-03, and added two additional issues which were directed to have her technical working group take them up for review. Those 2 specific issues stemmed from the vetoes on AB 206, which would have increased Nevada's RPS, and SB 392, which would have enabled community solar gardens to being operating in Nevada. In both veto letters, however, the Governor directed the committee on energy choice to study both an enhanced RPS and community solar gardens and provide recommendations on these issues. Further, in both veto letters, Governor Sandoval reiterated his commitment to more clean, renewable energy for the "New Nevada". Specifically, he stated in the veto letter to AB 206 that "Nevada will be the nation's leader in clean and renewable energy development."

Ms. Taylor highlighted the language under paragraph 3(b) within the energy choice initiative, "Nothing herein shall be construed to invalidate Nevada's public policies on renewable energy,

energy efficiency and environmental protection or limit the Legislature's ability to impose such policies on participants in a competitive electricity market." Ms. Taylor said that she believes this is a key piece of the initiative. Nevada has adopted significant policies on renewable energy, energy efficiency, and ways to continue to move our clean energy future forward. Ms. Taylor believes these policies should be integrated into the potential restructured market. Ms. Taylor said that as she goes through the recommendations, it will be clear that they are at a fairly high level. However, she understands that these recommendations which are considered by the full committee can be edited including the ability to recommend and adopt additional details or policy specifics. Ms. Taylor provided a summary of the issues along with the recommendations that the technical working group decided upon.

A full copy of the recommendations is part of the meeting materials and have been attached as exhibit D for full reference.

Mr. Luttrell and Ms. Taylor discussed net metering and how it is currently affecting the states that Mr. Andersen brought up in his presentation earlier. Based on some of the presentations it appears to be setup in different ways under each state.

Mr. Brooks and Ms. Taylor discussed whether or not the technical working group had come to a yes or no recommendation regarding the RPS and Community Solar issues that were added to the technical working group. It was recommended that these are neither in conflict with or in lockstep with the energy choice should it pass.

Chair Hutchison and Ms. Taylor discussed RPS as the bargaining point on an open market, and where Nevada's RPS standards compare to other states.

Mr. Anderson thanked Ms. Taylor and her group for all of their hard work and efforts.

Chair Hutchison closed agenda item No. 7.

8. Update on Public Utilities Commission Investigatory Docket #17-10001 related to the Energy Choice Initiative – CEC Staff:

Chair Hutchison opened agenda item No. 8

Matt Morris, Legislative Director of the Governor's Office, came forward to discuss the update. Mr. Morris provided a quick update to the full committee on the status of the PUCN docket.

Mr. Morris went through the workshop schedule that was announced and then proceeded by an initial comment period that occurred on or before December 8. This was followed by a reply period and those comments were due January 3. Mr. Morris said that the workshop began a sort of pre-hearing on January 9th when Reynolds announced the organization of the workshop. The workshops would occur January 16 through January 30 and were basically organized into legal issues, wholesale market issues, retail, and cost issues. On January 16 and January 23, the PUC held workshops regarding the legal issues. The workshops explored amendments to potentially repeal any current laws that would need repealing in order to establish the open competitive

market. On January 17 and January 24, workshops were held regarding wholesale market issues related to establishing reliance on existing markets. On January 18 there was a workshop regarding the retail market and another follow up session dealing with those issues occurred on January 25. On January 19, a workshop was held to discuss costs issues, short and long-term benefits and risks. On January 22, an all-purpose workshop was held. On January 29th there was a session that was held to discuss timelines. The workshops concluded on January 30, with a closing session. Mr. Morris said that currently three of the working groups will be looking at the report issue by the PUC, which should come out in April. The full committee will use that information and build recommendations from that report which will provide more of the technical analysis needed. The final recommendations are due to the Governor on August 9, 2018.

Chair Hutchison thanked Mr. Morris for his work on this.

Chair Hutchison closed agenda item No. 8

9. Chairman's Report:

Chair Hutchison opened agenda item No. 9

Chair Hutchison gave an update on where the committee is. He discussed the two reports from Mr. Luttrell and Ms. Taylor and that the PUC should have a final report out in April. The remaining technical working groups will continue to meet and use the report from the PUC to provide recommendations to the committee. Chair asked the members to keep in mind the text and context of the executive order and reminded the members that the reports should be prepared for the full committee meeting that will occur on May 9. After this, the staff will put together a comprehensive document for all of the recommendations that will be finalized by what the full committee agrees on and provided to the governor by the due date.

Chair Hutchison closed agenda item No. 9

10. Public comments and discussion:

Chair Hutchison opened Agenda Item No. 10 and asked if anyone from the public sought to make a comment on the matter in both Carson City and Las Vegas locations.

Fred Voltz, citizen would like to suggest on how the committee should proceed. 'When looking at the actual initiative language it is guarantying everyone a right to choose but we know that not everyone will have that right so it's not something that the legislature would have the ability to make sure that happens.' Mr. Voltz discussed the PUC workshop and the fact that no one could come up with a cost that would be imposed on the state. He said that between the PPA and the sell off's we are looking at 5-7 billion dollars in what needs to be repaid by the consumers. He believes this would be over \$5k per Nevadan to implement this choice initiative. Mr. Voltz expressed his concern with the initiative.

Greg Ferrante with the Nevada Solar Association provided a statement and his opinion on the initiative and the net metering system. Mr. Ferrante said the Nevada Solar Association supports the initiative and what the committee can do to implement it. Mr. Ferrante read a statement which has been attached as exhibit B for full reference.

Mr. Brooks made a comment in reply to Mr. Ferrante's statement and spoke about the new net metering system that would exist under the initiative and expressed his support of folks like the Nevada Solar Association to stay engaged in the process.

Blake Guinn, Nevada Consumers for Energy Choices spoke about the meetings that had been happening over the last year and feels that so far not much has come out of the committee meetings and there is not an answer for the consumers. He feels that a free market would provide real choice for the consumers and looks forward to the final recommendations of the committee.

Chair Hutchison closed agenda item No. 10

11. Adjournment

Chair Hutchison opened agenda item No. 11 and asked if there was a motion to adjourn. Ms. Taylor submitted the motion to adjourn and Mr. Witt seconded that motion. The motion carried unanimously.

Chair Hutchison thanked all for their participation and attendance and adjourned the meeting at 3:55 PM.

Exhibit A'

March 7, 2018 Angel De Fazio Governor's Committee on Energy Choice Meeting

After spending 33 hours and 12 minutes over ten days, monitoring the PUC's recent investigatory workshops about the energy choice constitutional amendment, a parsing of the language used leads to one take-away point: the vague language induced Nevada voters to believe they would have both lower rates and energy choice.

Ded Rossone of the initiative's drafters admitted at the PUC workshops there is no / // assurance of lower rates. As this admission is part of the official meeting record, the implementation of this initiative prospectively becomes a constitutional 'lie.'

The PUC workshops were to arrive at comprehensive costs required to implement this initiative. The only participant offering this cost information in any meaningful way was the incumbent electric company for 90% of the Nevada's Drink population. . . NVE. None of the lobbyists, attorneys or out-of-state companies hoping to

do business in Nevada offered any useful Nevada cost information despite repeated requests to do so.

The most recent monthly Average Price of Electricity to Customers (December 2017) produced by the U.S. Department of Energy's Energy Information Administration shows that California's 'All Sectors' cost per kilowatt hour is 18.48 cents while Nevada's is 12.34 cents, or one-third lower.

> This troubling comparison shows that connecting with California to operate Nevada's grid, or otherwise following in California's energy policy footsteps is a certain path to higher, not lower rates.

> Cumulatively, the multiple problems of mass ratepayer education, billing integration, changing the energy provider for 1.3 million Nevada electric ratepayers. placing something in the constitution that clearly does not belong there, the poor performance of other states that have pursued this same path through legislative means alone, creating adequate consumer protections, and so many other glitches that surfaced during the Technical Working Groups' deliberations suggests that this Committee's findings should not support implementation of this initiative.

> Everyone knows this is a revenge ballot question by Switch and Sands, because of them having to pay an exit fee. Since the Governor convened this committee, his Department of Energy should provide all the necessary funding to EDUCATE Nevadans before they vote on this revenge constitutional amendment!

March 7, 2018

I am completely against Ballot question Number 3, the Energy Choice Initiative.

While the initiative's legal language creates an express right for each and every Nevadan of electric choice and lower costs, there are four groups of Nevadans who will not necessarily have the benefit of these rights:

- -Residents of 143 mobile home parks statewide where the landlord chooses and controls the electricity supplier and re-bills the tenants, ie master-metered parks
- -Roughly 7,000 current NVE customers who pay a surcharge to retain analog meters because of the unresolved health, safety and privacy concerns
- -75,000 municipal and rural electric cooperative customers where prospective reduction of the relatively small customer base (if competitors are will to service the area at all) would place these entities in economic peril and likely raise rates for those who remain; and
- -An unknown number of multi-family dwellings, typically older buildings, where there is one electric meter for all the units (a master-meter situation) and rewiring and re-metering to each dwelling unit would be a costly, new undertaking ultimately borne by the tenants paying rent.

How do these Nevadans waive their constitutional rights, unlike the handful of other US jurisdictions that universally created their versions of electricity competition via legislation?

Will each person be forced to sign a waiver form as a condition of remaining a resident/customer or receiving electric service at all?

That's one solution, although waiving one's constitutional right to choice and lower costs without a viable alternative (Consider the Miranda warning in criminal arrests where the option is to say nothing versus incriminating one's self before consulting with an attorney) poses significant legal problems our court system could be litigating for some time and at considerable new expense to Nevada ratepayers and taxpayers.





6440 Sky Pointe Drive #140-430 - Las Vegas, NV 89131

Good Afternoon, I am Greg Ferrante, President of the Nevada Solar Owners Association. I'm here on behalf of the 3,500-plus Nevada solar owners who have made long-term investments for their homes and support solar energy. Most of us chose to invest in PV panels because it was a smart financial investment. I myself purchased a \$90k system that helped our family save hundreds of dollars on our monthly power bill.

Through the many years and many solar fights, NVSOA has fought to protect the rights of solar homeowners like my family and the 30,000 other families who chose to go solar. People made significant financial decisions and should be protected. What happened years ago was a gross financial injustice, but Nevada is turning a new leaf. We've been following the proceedings through the PUC and we've welcomed the new direction they've taken in not allowing NV Energy to raise rates on ratepayers or punish solar homeowners.

We appreciate all the work you're doing to create this new energy free market, and ask that you continue smart solar policies like reasonable net-metering and other tax credits and incentives for clean energy programs that homeowners can take advantage of. We're hopeful that under ECI, homeowners will be able to see more affordable rates and reliable choices. We also want to make sure that other Nevadans have the freedom to go solar as well and take advantage of the cost savings for their families.

Nevada homeowners are watching this process and eagerly waiting for what you recommend and how it will impact our energy bills and power choices. Thanks for your time and good luck.

Governor's Committee on Energy Choice Technical Working Group on Generation, Transmission and Delivery DRAFT Findings & Recommendations

RECOMMENDATIONS:

- A. The PUCN should continue to address Resource Adequacy and Planning Reserve requirements through the existing Integrated Resource Planning Process until an organized open competitive market is established by the Legislature.
- B. NV Energy should identify must-run generation units and provide multiple options to eliminate the condition(s) giving rise to the must run status along with the estimated cost and time frame for implementation of each option provided. Construction costs should be recovered through ratepayers.
- C. Transmission import and export capacity will need to be studied to see if additional expansion is necessary to join a wholesale market such as CAISO or SPP.

FINDINGS:

A. <u>Issue – Resource Adequacy & Planning Reserves:</u> Energy choice requires resource adequacy, including required reserves, to exist within the wholesale market region at the time Energy choice is implemented (i.e. there must be ample generation in the wholesale market area to meet expected loads in the market region served in order to foster competitive wholesale pricing of that generation). If Nevada elects to join an existing organized wholesale market such as the California Independent System Operator (CALISO) or the Southwest Power Pool (SPP), the wholesale market region is that of the organized wholesale market. If Nevada elects to create its own organized wholesale market, the wholesale market region is that of Nevada.

TWG Findings:

- Currently resource adequacy exists for the CALISO (see presentation by Stacey Crowley, April 26, 2017). Installed generation capacity is reported at 71,740 MW. Nevada native load peak of 7,961 MW occurred in 2016 (native load is only that of NV Energy affiliates and does not include balancing area loads of rural Nevada utilities, municipal utilities, and 704B customers) and would add approximately 11% (excluding reserves) to the CALISO resource requirement. The processes CALISO has in place to increase generation to meet Nevada native load require further investigation.
- Currently resource adequacy exists for the SPP (see presentation by Carl Monroe and Bruce Rew, August 8, 2017). Installed generation capacity is reported at 50,622 MW. Nevada native load peak of 7,961 MW occurred in 2016 (native load is only that of NV Energy affiliates and does not include balancing area loads of rural Nevada utilities) and would add approximately 16% to the SPP resource requirement. The processes SPP has in place to increase generation to meet Nevada native load require further investigation.

- Regional resource adequacy is verified by the Federal Energy Regulatory Commission (FERC) in its Winter 2017-18 Energy Market Assessment, Docket No. AD06-3, which states "Electricity capacity is adequate in all regions."
- By 2020 the shortage in resource adequacy is reported by NV Energy to be 1,178 MW, the equivalent of two large baseload/intermediate generating plants.
- Building out of new generation requires several years to plan, permit, finance and construct.
 Development of new baseload or intermediate generation resources within Nevada may not be possible within the available time frame. Buildout of new peaking or utility scale renewable resources may be possible in the time frame available.
- The decision on what organized wholesale market Nevada will participate in must be made several years in advance of the effective date of Energy Choice in order to provide time for the organized wholesale market to prepare for and adjust its resource mix for Nevada, or for Nevada to construct additional generation should Nevada elect to create its own organized wholesale market.
- Resource adequacy issues in Nevada will be further exacerbated by generation units or purchased power agreements that are not marketable for various reasons including contract terms, cost of generation or age of generating units. NV Energy currently has approximately 6,011 MW of owned generation and 2,930.5 MW in purchased power agreements (including pre-commercial agreements) (see presentation by Kevin Geraghty, June 21, 2017). The two primary electric energy trading hubs available for Nevada markets are COB and Mead. The trading hubs serve as a proxy as to current competitive wholesale markets in the region. Generation assets held by NV Energy with bus bar costs above these trading hub prices or purchased power agreements (PPAs) with pricing above these hubs may be difficult to liquidate and will further add to Nevada's resource adequacy issues in the short term. Current pricing at Mead follows in the below table. Of the 61 PPAs identified by NV Energy, all but the Kingston, Mill Creek, Newmont, TMWRF, Techren 2, Hoover, Stillwater PV, NPC_SPCC, and Techren 1 PPAs have pricing in excess of the Mead trading prices.

MEAD
Quote Date 10/13/2017

Forward Month	On Peak (6x16)	Wrap	7X24
Nov-17	\$28.207	\$23.281	\$26.014
Dec-17	\$29.105	\$25.079	\$27.244
Jan-18	\$29.406	\$26.852	\$28.280
Feb-18	\$28.939	\$25.659	\$27.533
Mar-18	\$26.944	\$23.139	\$25.352
Apr-18	\$25.268	\$20.382	\$23.096
May-18	\$25.878	\$21.455	\$23.928
Jun-18	\$35.404	\$25.712	\$31.312
Jul-18	\$43.476	\$25.919	\$35.359
Aug-18	\$42.315	\$26.075	\$35.505
Sep-18	\$32.133	\$23.894	\$28.288

Oct-18	\$28.801	\$25.005	\$27.209
Nov-18	\$27.060	\$23.228	\$25.354

- Of the generation assets owned by NV Energy, its two coal resources Navajo Generating Station (255 MW) and North Valmy Generating Station (261 MW) are slated for retirement before or near the effective date of Energy Choice. These retirements will further add to the resource adequacy issues in the short term. Other units which were constructed prior to 1980 may be difficult to market such as Tracy Unit 3 (1974, 108 MW), Fort Churchill Units 1 and 2 (assuming must run conditions eliminated)(1968, 226 MW), and Clark Unit 4 (1973, 54 MW).
- In addition to other factors, resource adequacy is affected by planning reserves. Reserves are intended to assure sufficient generation resources are available to meet real-time operating requirements and to avoid the possibility that a load loss occurs no more frequently than one day in 10 years, commonly referred to as the "1-in-10 resource adequacy standard". Reserve margins directly affect reliability of the electric grid and cost of electric service.
- The concept of planning reserve margins is described by the North American Electric Reliability
 Corporation (NERC) as "...planning reserve margin is designed to measure the amount of
 generation capacity available to meet expected demand in planning horizon. Coupled with
 probabilistic analysis, calculated planning reserve margins have been an industry standard used
 by planners for decades as a relative indication of adequacy."
- Reserve margins have been historically established by individual regulated utilities using various methodologies to achieve the "1-in-10 resource adequacy standard". Differences exist among utilities in their calculation of planning reserve margin under the "1-in-10 resource adequacy standard". For example, some system operators calculate reserve margins using the nameplate capacity of intermittent generation such as wind and solar, while others use a derated capacity value.
- For the regulated utility in Nevada, reserve margins are established as a percentage of net
 customer requirements for NV Energy's native load and are 12 percent for NV Energy's
 customers in southern Nevada and 15 percent for NV Energy customers in northern Nevada.
 These reserve margins amount to 941 MW of generation in the year 2020, again the equivalent
 of two large baseload/intermediate generating plants.
- In a post Energy Choice environment, the regulated utility in Nevada will no longer be
 responsible for generation development but will continue to remain responsible for the
 development of transmission and distribution facilities to deliver electric energy to consumers
 within its designated service area. Reserve margins should be appropriate for Nevada specific
 circumstances.
- **B.** <u>Issue Reliability Must-Run Units:</u> Must-run generation units are those generation units that must run in order to provide for electric grid reliability under certain conditions. By definition a must-run generation unit has no competition, it is the only unit that can be operated to meet/eliminate the condition giving rise to the must run unit (i.e. transmission capacity overloads and transmission outages).

TWG Findings:

- NV Energy has identified four must-run generation units which if sold without addressing the
 must run condition, could result in anti-competitive behavior by the owners of such units. These
 units are:
 - 1. Fort Churchill Generating Station,
 - 2. North Valmy Generating Station,
 - 3. Clark Generating Station, and
 - 4. Clark Mountain Generating Station.
- Anti-competitive pricing by owners of must run generation units can be eliminated by pricing
 controls enacted by the organized wholesale market, or by elimination of the must run
 conditions through transmission system modification, load shedding or peak clipping that allow
 competition to occur.
- C. <u>Issue Expanding Import/Export Transmission Capacity:</u> Some of the advantages of joining an organized wholesale market include (a) participating in economies of scale relating to generation development, (b) taking advantage of load diversity amongst market participants, (c) minimizing overall quantities of reserves held in the market region, and (d) making the natural resources of various areas (solar, wind, geothermal) available to all participants of the organized wholesale market. To achieve these benefits will require sufficient transmission import and export capability from Nevada to the overall region served by the wholesale market.

Transmission planning in Nevada currently occurs in a vertically integrated utility environment in which one organization forecasts load requirements; and plans the generation and transmission to meet that requirement. Once approved by the regulatory body, the utility proceeds with development efforts. As pointed out by Pat Woods in his presentation on May 10, 2017; one of the critical components to ensure success of competitive wholesale markets (and by extension ultimately retail markets) is that the region covered by the market must have "robust" transmission infrastructure.

Currently, transmission development is funded by the regulated utility's investors who earn a rate of return on that investment once a project is approved by the Public Utilities Commission of Nevada. Transmission development in an Energy Choice environment may occur in a variety of formats including transmission companies, existing utilities, and state funded projects.

TWG Findings:

- The transmission system serving Nevada is electrically connected to all of its surrounding states. However, greatest connectivity from an import/export capacity perspective exists with California and Arizona (see presentation of Shahzad Lateef and Marc Reyes, November 7, 2017). This connectivity could support the deployment of the CALISO organized wholesale market into Nevada; however, development of a Nevada-only or deployment of an SPP organized wholesale market could also occur with the adoption of interchange policies between adjacent organized wholesale markets as common in organized wholesale markets serving Midwest, east and northeast regions of the country.
- Transmission import and export capabilities into Nevada are less than NV Energy's existing native load. Southern Nevada import limits are reported at 5,331 MW and northern Nevada import limits are reported at 1,000 MW.

- Increasing transmission import and export limitations is currently a multi-year process involving numerous stakeholders including interconnected transmission owners, regional transmission operators, the Western Electricity Coordinating Council, public utility regulatory bodies, local planning commissions, federal land management agencies, land owners, environmental groups, and citizen groups.
- Until import and export limitations are increased, Nevada based generation serving NV Energy native load is required.
- The current process used in Nevada to plan generation and transmission resources is the Integrated Resource Planning (IRP) process. This process is codified in NRS and NAC. Under the IRP process, NV Energy files with the Nevada Public Utilities Commission its IRP every three years and an energy supply plan annually. Much of this process may no longer be applicable to NV Energy in an Energy Choice environment.
- Using the IRP process, NV Energy historically has built the least-cost transmission option to meet local needs. In an Energy Choice environment transmission must be planned proactively as "highways" to benefit region covered by the organized wholesale market. This broader approach to transmission planning allows loads to be served and renewable generation options to be developed.
- In an Energy Choice environment responsibility for planning transmission to support local needs and to eliminate must run generation units may still fall to the utility.
- In an Energy Choice environment responsibility for planning transmission to support increases in Nevada import and export capabilities may need to be placed upon the regional transmission operator and the organized wholesale market.
- In an Energy Choice environment responsibility to plan transmission to support development of localized wind, solar and geothermal resources may need to be placed upon an existing or new state agency.
- In a vertically integrated utility model transmission study costs under the existing integrated resource planning process are borne by electric utility rate payers. Transmission study cost responsibility in an Energy Choice environment will need to be addressed.
- Texas instituted a program called the Competitive Renewable Energy Zones (CREZ) transmission development. Under CREZ, ERCOT identified areas of the state best suited for wind development. The Public Utility Commission of Texas then selected those areas as CREZ. ERCOT developed transmission plans to transfer future wind energy from CREZ to loads.
- A joint venture called Electric Transmission Texas (ETT) was formed to by several companies to construct approved transmission projects. Once a transmission project is constructed the ETT receives a return on its investment through transmission revenues collected by ERCOT.
- Use of the CREZ process resulted in the development of 18,500 MW of generation in Texas.
 Texas produces more wind power than any other state. Wind energy accounts for 12.63% of the energy generated in Texas.
- A variety of other methods to fund transmission projects are used by regional transmission organizations. One concept used by SPP for high voltage lines is identified as the "highway/byway" methodology. Under this concept cost responsibility is allocated based on voltage as follows:

<u>Voltage</u>	Region Pays	<u>Local Zone Pays</u>
300 kV and above	100%	0%
Above 100 kV and below 300 kV	33%	67%

100 kV and below 0% 100%



WORK SESSION DOCUMENT GOVERNOR'S COMMITTEE ON ENERGY CHOICE

Technical Working Group on Innovation, Technology and Renewable Energy Policy Recommendations to be Presented for Consideration by the Full Committee on Energy Choice

The Technical Working Group on Innovation, Technology, and Renewable Energy has been charged with examining the following specific topics related to the Energy Choice Initiative (E.C.I.):

Energy Efficiency Programs
Demand-side Management Programs
Renewable Portfolio Standards
Electric Vehicles
Aggregation Programs, including Community Solar Programs
Incentive Programs for other Technologies of Interest
Net Metering
Blockchain Technology

Pursuant to Executive Order 2017-03 and Executive Order 2017-10, and in accordance with the directive given at the November 7, 2017 meeting of the Governor's Committee on Energy Choice, during which Chairman Mark Hutchison instructed Committee Technical Working Groups to prepare summaries and policy recommendations for consideration by the full Committee, the Technical Working Group (TWG) on Innovation, Technology and Renewable Energy hereby reports the following presentations and recommendations.

This TWG has met six times since formation and received ten presentations. While this TWG spent a significant amount of time on the topics assigned in its workflow, the issue of opening Nevada's retail energy market is time consuming and complicated, and more details and issues need to be analyzed. An Appendix following this report provides additional details on those presentations, including each presenters' proffered recommendations relating to innovations and technology in renewable energy development, should the E.C.I. pass into effect.

1. <u>Potential Impacts of a Restructured Energy Market on Currently-Existing Renewable Energy Programs</u>

STATEMENT OF THE ISSUE: Nevada's current energy goals and policies recognize the need for and benefits of indigenous renewable energy development, conservation of energy, environmental protection, economic development and improved technology. NRS 701.010. Under existing state law and regulations, certain renewable energy programs are mandated and being pursued by stakeholders across Nevada, including low-income energy efficiency and conservation programs, incentives for the installation of distributed renewable generation, economic development incentives, development under the renewable portfolio standard, net metering and incentives for the development of other burgeoning technologies like storage and electric vehicles. Should the E.C.I. pass a second time at the General Election in November of

2018, there will likely be some effect on these existing programs under a restructured market. However, the language of the E.C.I. states: "Nothing herein shall be construed to invalidate Nevada's public policies on renewable energy, energy efficiency and environmental protection or limit the Legislature's ability to impose such policies on participants in a competitive electricity market." The following findings relate to the potential effects of a restructured market on current programs in Nevada relating to renewable energy.

SUMMARY OF PRESENTATIONS:. The following presentations relating to existing renewable energy programs and potential opportunities to continue those types of programs, should the E.C.I. pass into effect, have been offered to the TWG.

- I. Pat Egan, Senior Vice President of Renewable Energy and Smart Infrastructure, NV Energy – Mr. Egan presented before the working group on Oct. 10, 2017, and reviewed current NV Energy programs related to energy efficiency, demandside management, energy storage, and recently approved legislative measures from the 2017 Legislative Session.
- II. Jason Burwen, Policy and Advocacy Director, Energy Storage Association. Mr. Burwen presented before the working group on December 5, 2017, and reviewed current advances in storage technology and policies that support its further development and implementation.
- III. Anthony Star, Director, Illinois Power Agency. Mr. Star presented before the working group on October 10, 2017, and reviewed his agency's role in supporting the development of renewable energy, energy efficiency and other clean energy incentive programs. Mr. Star's presentation also informs other issues discussed in this document.
- IV. Hank James, Executive Director, Nevada Rural Electric Association (NREA) and Jesse Wadhams, Fennemore Craig. Mr. James and Mr. Wadhams presented before the working group on January 23, 2018, and reviewed the structure of its members, Nevada's rural electric cooperatives, power districts and municipal utilities. This presentation also broadly described how NREA members provide options for renewable energy programs within their services territories.
- V. Chris Neme, Energy Futures Group Consulting. Mr. Neme presented before the working group on February 6, 2018. Mr. Neme described how energy efficiency can be a resource for energy, capacity, transmission and distribution, and provided options for how these programs can be offered in a retail choice market.

2. Restructured Energy Markets and Renewable Portfolio Standards (RPS)

STATEMENT OF THE ISSUE: Executive Order 2017-10 directed the Committee on Energy Choice to examine "whether or how to implement the ideas in Assembly Bill 206," which would have raised Nevada's Renewable Portfolio Standards. EO 2017-10 stated that the bills were vetoed because, "among other things, there was significant uncertainty as to how the policies in the bills would be affected by the proposed amendment to the Nevada Constitution contained in the upcoming 2018 ballot question." Further, EO2017-10 stated that "the members of the CEC

are uniquely qualified to examine whether or how to implement the ideas in AB 206 and SB 392 should Nevada's voters pass the Energy Choice Initiative for the second time. Finally, EO 2017-10 stated that it is "necessary and prudent that the CEC study, review and discuss Nevada's renewable portfolio standards... and make recommendations." Nevada's RPS currently calls for 25% of energy to be derived from renewable sources by 2025.

SUMMARY OF PRESENTATIONS: The following presentations relating to RPS and restructured energy markets have been offered to the TWG.

- Maria Robinson, Associate Director of Energy Policy and Analysis, Advanced Energy Economy – Ms. Robinson presented before the working group on Aug. 9, 2017 and reviewed market structures and whether RPS encourages continued development of Nevada's renewable resources
- II. Amanda Levin, Climate and Energy Advocate, Natural Resources Defense Council. Ms. Levin presented before the working group on Aug. 9, 2017 and discussed the relationship between RPS and Nevada's role as a regional leader in the development of cost-effective energy generation. Ms. Levin also provided historical information for other states that have both an open retail market and RPS. Ms. Levin's presentation provided information indicating that an RPS and an open retail market are not inherently intertwined and not inherently in conflict, such that should the legislature revisit Nevada's RPS, passage of ECI would neither inhibit nor enable that legislative review.
- III. Sue Tierney, Analysis Group, presented to the Committee on Energy Choice on November 7, 2017 and provided information pertinent to this TWG on how other states with customer choice have implemented renewable portfolio standards.

3. <u>Implications of a Restructured Energy Market regarding</u> <u>Community Solar Programs and Net Metering</u>

STATEMENT OF THE ISSUE: Executive Order 2017-10, amending Executive Order 2017-03, directed the Committee on Energy Choice to examine "whether or how to implement the ideas in Senate Bill 392, which would have allowed community solar gardens to begin operating in Nevada." Specifically, EO 2017-03 was amended to add the following topics for the CEC to address to include "allowing community solar gardens to begin operating in Nevada." Additionally, in 2017, AB 405 established new parameters for rooftop solar technologies. There will likely be impacts resulting from a restructured energy market on opportunities for developing community solar programs as well as impacts for rooftop solar development.

SUMMARY OF PRESENTATIONS: The following presentations relating to rooftop solar and community solar gardens have been offered to the TWG.

- I. Justin Barnes, EQ Research, LLC. Mr. Burwen presented before the working group on January 23, 2018 and discussed retail choice and net metering considerations.
- II. Marta Tomick, Program Director, Vote Solar. Ms. Tomick presented before the working group on Dec. 5, 2017 and provided an overview of community solar

programs in restructured markets and reviewed issues to consider in integrating community solar programs under a restructured energy market. Ms. Tomick's presentation. Ms. Tomick's presentation also provided information indicating that community solar programs and an open retail market are not inherently intertwined and not inherently in conflict, such that should the legislature revisit Nevada's enabling of community solar opportunities, passage of ECI would not inhibit nor enable that legislative review.

4. <u>Implications of a Restructured Energy Market for Nevada's</u> Ability to be a Net Energy Exporter

STATEMENT OF THE ISSUE: Executive Order 2017-03 directed the Committee on Energy Choice to assess Nevada's goal of becoming a net exporter of energy. A restructured energy market in Nevada may pose significant implications for this strategic goal.

SUMMARY OF PRESENTATIONS:

I. Phil Pettingill, Director, Regional Integration, California ISO. Mr. Pettingill presented on October 10, 2017 and provided an overview of CAISO's increasing integration of distributed energy resources into the ISO market.

5. Recommendations of the Innovation and Technology in Renewable Energy Development Working Group

Based upon the information provided to the working group, the following recommendations are proposed for consideration by the Committee on Energy Choice:

- A. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor, Legislature, and regulatory agencies and organizations to implement the E.C.I., should it be approved by the voters again in 2018, in a manner that conditions market participation on retail offerings that align with Nevada's existing goals for renewable energy, energy efficiency and technology, and that do not harm Nevada's current programs, statutes, and regulations including, but not limited to, renewable energy requirements, energy efficiency, subsidized services for low-income customers, net metering as set out in AB 405 (2017), and storage.
- B. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to adopt, should the E.C.I. ballot question pass, competitive retail market policies that do not impede progress and innovation in current and future technologies, and to develop and promote innovative policies and programs that advance the use of renewable energy and clean technology.
- C. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to consider, should the E.C.I. pass, the

- creation or funding of incubators or pilot projects for innovative technologies that may provide meaningful choice for Nevadans.
- D. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to consider policies, should the E.C.I. be approved, that promote regulatory flexibility for incentives to renewable energy programs that offer pilot programs to integrate "smart" energy technologies that support distributed generation, storage, and other clean energy advances, including policies that could promote transportation innovation such as green fleets and the use of electric vehicles for storage and distributed generation, and to revisit the topic of community solar gardens during the 2019 Legislative Session
- E. The working group recommends that the Governor's Committee on Energy Choice encourage the Governor and the Legislature to evaluate, should the E.C.I. ballot question pass, all proposed policies and programs with a consideration of positioning Nevada as a net exporter of energy.

WORK SESSION DOCUMENT APPENDIX

GOVERNOR'S COMMITTEE ON ENERGY CHOICE

Technical Working Group on Innovation, Technology and Renewable Energy
Policy Recommendations to be Presented for Consideration
by the Full Committee on Energy Choice

This appendix includes all of the documents, such as PowerPoints or handouts, provided by those who made presentations to the Technical Working Group. Following is a list of the witnesses who provided those documents in the order in which they appeared before the TWG. Following that, this appendix includes a list of those presentations, including their supporting documentation, that were made to the full Committee on Energy Choice and are pertinent to the TWG's assigned topics.

- 1. Maria Robinson, Associate Director of Energy Policy and Analysis, Advanced Energy Economy Ms. Robinson presented before the working group on Aug. 9, 2017 and reviewed market structures and whether RPS encourages continued development of Nevada's renewable resources.
- 2. Amanda Levin, Climate and Energy Advocate, Natural Resources Defense Council. Ms. Levin presented before the working group on Aug. 9, 2017 and discussed the relationship between RPS and Nevada's role as a regional leader in the development of cost-effective energy generation. Ms. Levin also provided historical information for other states that have both an open retail market and RPS. Ms. Levin's presentation provided information indicating that an RPS and an open retail market are not inherently intertwined and not inherently in conflict, such that should the legislature revisit Nevada's RPS, passage of ECI would neither inhibit nor enable that legislative review.
- 3. Anthony Star, Director, Illinois Power Agency. Mr. Star presented before the working group on October 10, 2017, and reviewed his agency's role in supporting the development of renewable energy, energy efficiency and other clean energy incentive programs. Mr. Star's presentation also informs other issues discussed in this document.
- 4. Pat Egan, Senior Vice President of Renewable Energy and Smart Infrastructure, NV Energy Mr. Egan presented before the working group on Oct. 10, 2017, and reviewed current NV Energy programs related to energy efficiency, demand-side management, energy storage, and recently approved legislative measures from the 2017 Legislative Session.

- 5. Phil Pettingill, Director, Regional Integration, California ISO. Mr. Pettingill presented on October 10, 2017 and provided an overview of CAISO's increasing integration of distributed energy resources into the ISO market.
- 6. Jason Burwen, Policy and Advocacy Director, Energy Storage Association. Mr. Burwen presented before the working group on December 5, 2017, and reviewed current advances in storage technology and policies that support its further development and implementation.
- 7. Marta Tomick, Program Director, Vote Solar. Ms. Tomick presented before the working group on Dec. 5, 2017 and provided an overview of community solar programs in restructured markets and reviewed issues to consider in integrating community solar programs under a restructured energy market. Ms. Tomick's presentation. Ms. Tomick's presentation also provided information indicating that community solar programs and an open retail market are not inherently intertwined and not inherently in conflict, such that should the legislature revisit Nevada's enabling of community solar opportunities, passage of ECI would not inhibit nor enable that legislative review.
- 8. Justin Barnes, EQ Research, LLC. Mr. Burwen presented before the working group on January 23, 2018 and discussed retail choice and net metering considerations.
- 9. Hank James, Executive Director, Nevada Rural Electric Association (NREA) and Jesse Wadhams, Fennemore Craig. Mr. James and Mr. Wadhams presented before the working group on January 23, 2018, and reviewed the structure of its members, Nevada's rural electric cooperatives, power districts and municipal utilities. This presentation also broadly described how NREA members provide options for renewable energy programs within their services territories.
- 10. Chris Neme, Energy Futures Group Consulting. Mr. Neme presented before the working group on February 6, 2018. Mr. Neme described how energy efficiency can be a resource for energy, capacity, transmission and distribution, and provided options for how these programs can be offered in a retail choice market.
- 11. Sue Tierney, Analysis Group, presented to the Committee on Energy Choice on November 7, 2017 and provided information pertinent to this TWG on how other states with customer choice have implemented renewable portfolio standards.